

Remarks/Arguments

Claims 1-6 and 8-10 are pending in the application.

Claims 1-6 and 8-10 have been rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi. The present invention is directed to a device for driving a display and to a method of testing driver circuits. The driver circuit of this invention includes leads that are supplied with one or more voltages by a voltage generator. The leads are connected to output stages that are preferably provided with a corresponding multiplex device. The multiplex devices select one of the voltages supplied to the leads and the selected voltage is conducted through an amplifier to output. A first switching device is provided between the voltage generator and the output stages to separate the leads from the voltage generator to allow interruption of the voltage supply to the leads. The first switching device is capable of interrupting the leads separately and is capable of interconnecting the leads enabling a voltage to be applied to all leads. A second switching device is provided to switch the potential that is applied to the output stage to test a reference potential. Independent claim 1 recites a device for driving a display device, which device is

provided with M leads that are coupled to at least one multiplex device and are coupled to a voltage generator through a first switching device that enables interruption of a voltage supply to the M leads so that a voltage already present in at least one of the M leads is no longer driven and is held until any leakage currents or parasitic capacitances give rise to a discharge, and also provided with at least one second switching device that is coupled to the M leads to enable at least one of the M leads that is no longer driven after opening of the first switching device to be switched to a selectable potential. Independent claim 10 recites a method of testing a driver circuit, in which the driver circuit is supplied with at least one voltage on M leads, in which the M leads are coupled to a voltage generator through a first switching device so that the voltage supply to the M leads is interrupted by means of the first switching device so that a voltage already present in at least one of the M leads is no longer driven and is held until any leakage

currents or parasitic capacitances give rise to a discharge, in which one of the M leads is selected by means of at least one multiplex device that is coupled to the M leads, and in which the supplied voltage on the selected lead is switched to a test reference potential by means of a second switching device.

~~A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v.*~~

~~*Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).~~

Hayashi discloses an LCD test system that includes a sweep timing generator 39 that generates various timing signals and control signals including vertical and horizontal clock signals, a gate control signal, and vertical and horizontal drive signals to be applied to the LCD panel under test and a test signal to be applied to a driver 40. The driver 40 generates, in real time, a high level reference voltage and a low level reference voltage based on the test signal from the sweep timing generator 39. The high reference voltage and the low reference voltage from the driver 40 are applied to the LCD panel 10 through the IV conversion circuit 43 and a video terminal 23.

~~The IV conversion circuit 43 converts the current of the video signal from the video terminal 23~~

to a corresponding voltage signal and supplies the same to the sample and hold circuit 43 and the test signals will be given later. The driver 40 generates the high and low voltage test signal by switching the reference voltages H and L based on the test signal from the sweep timing generator 39. The Examiner states that Hayashi teaches leads (23(1)–23(p)) coupled to a multiplexer (47) and to a first switching device (40) that enables interruption of a voltage supply from a voltage generator (39). However, as pointed out above, driver 40 is not a first switch that enables interruption of a voltage supply to the M leads so that a voltage already present in at least one of the M leads is no longer driven and is held until any leakage currents or parasitic capacitances give rise to a discharge as recited in claims 1 and 10. Driver 40 generates the high and low voltage test signal by switching the reference voltages H and L based on the test

signal from the sweep timing generator 39. Hayashi does disclose a switch SW. However, the switch SW disclosed by Hayashi is not coupled to the M leads to enable at least one of the M leads that is no longer driven after opening of the first switching device to be switched to a selectable potential as recited in claims 1 and 10. Since Hayashi does not disclose a first switching device and a second switching device as pointed out above, claims 1 and 10 cannot be anticipated by Hayashi. Claims 2-6, 8, and 9 depend from and further limit claim 1 and the above arguments regarding claim 1 are equally applicable to these dependent claims.

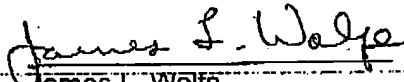
In view of the foregoing reasons for distinguishing over the cited references, Applicant has not raised other possible grounds for traversing the rejections, and therefore nothing herein should be deemed as acquiescence in any rejection or waiver of arguments not expressed herein.

CONCLUSION

Applicant submits that in view of the foregoing remarks and/or amendments, the application is in condition for allowance, and favorable action is respectfully requested. The Commissioner is hereby authorized to charge any fees, including extension fees, which may be required, or credit any overpayments, to Deposit Account No. 50-1001.

Respectfully submitted,

Date: March 2, 2005


James L. Wolfe
Registration No. 33,623
P. O. Box 2200
Hillsboro, Oregon 97123
Telephone: (503) 844-9009
Facsimile: (503) 296-2172
email: mail@ganzlaw.com

Correspondence to:

Philips Intellectual Property & Standards
1109 McKay Drive; Mail Stop SJ41
San Jose, CA 95131 USA
Telephone: (408) 474-9073
Facsimile: (408) 474-9082
USPTO Customer Number: 24738